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	DECLARATION FO	OR PATENT APPLICATION AND A	APPOINTMENT OF ATTORNEY	
my name; I b	believe that I am the original, are listed below) of the subje	first and sole inventor (if only one name	ice address and citizenship are as stated belo is listed below) or an original, first and joint a a patent is sought on the invention (Design, ion of which (check one).	inventor (if
\times	is attached hereto.			
	was filed onapplicable).	as Application Serial No	, and was amended on	(1f

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a) I hereby claim foreign priority benefits under Title 35, United States Code § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which the priority is claimed.

as International Application (PCT) No.

PRIOR FOREIGN APPLICATION(S)

Number	Country	DAY/MONTH/YEAR FILED	PRIORITY CLAIMED
			Yes No
			Yes No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating The United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1 56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

APPLICATION NUMBER	FILING DATE	STATUS (Patented, Pending or Abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine, or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: I (We) hereby appoint as my (our) attorneys, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: Ajay A. Jagtiani, Registration Number 35,205.

Send correspondence to:

JAGTIANI & ASSOCIATES 10379-B Democracy Lane

(if applicable).

Fairfax, Virginia 22030

Telephone calls to: Ajay A. Jagtiani

(703) 591-2664

See following pages for additional joint inventors.

Full Name of First or Solo BURFIELD, Evan C		Citizenship United States
Residence Address – Street 9852 Fairfax Square #225		Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Fairfax		City Fairfax
State or Country Virginia	Z _{IP} 22031	State or Country Zip Viriginia 22032
Date 10/13/98		SIGNATURE SHE BAR

DECLARATION . JR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

Page 2

Full Name of Additional Joint Inventor CHANG, Chia Chen		Cuizenship United States		
Residence Address – Street 804 Lawton Street		Post Office Address Street QED Innovations, 4013 Williamsburg Court		
City McLean		City Fairfax		
State or Country Virginia	Zip 22101	State or Country Zip Virginia 22032		
DATE 10/13/98		SIGNATURE ()		

Full Name of Additional Joint In	nventor	Citizenship United States		
Residence Address – Street 6314 Kiteline Court		Post Office Address Street QED Innovations, 4013 V	Post Office Address Street QED Innovations, 4013 Williamsburg Court	
City Columbia		Cuty Fairfax		
State or Country Maryland	Zip 21044	State or Country Virginia	Zip 22032	
DATE 10/13/98		SIGNATURE Drissel)	

Full Name of Additional Joint In EICHLER, Matthew	ventor	Citizenship United States
Residence Address - Street 2629 Washington Blvd.		Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Arlington		City Fairfax
State or Country Virginia	Zip 22201	State or Country Zip Virginia 22032
DATE 10/13/98		SIGNATURE SIGNATURE

Full Name of Additional Joint Inventor GARRETT, Richard		Citizenship United States
Residence Address - Street 9852 Fairfax Square #225		Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Fairfax		City Fairfax
State or Country Virginia	Zip 22031	State or Country Zip Virginia 22032
DATE 10/13/98		SIGNATURE Richal Hawall

See following pages for additional joint inventors.

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DECLARATION FOR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

DECEMBER	Page 2
Full Name of Additional Joint Inventor GROAT, Robert	Citizenship United States
Residence Address - Street 45862 Aberdeen Lane	Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Valley Lee	City Fairfax
State or Country Zip Maryland 20692	State or Country Zip Virginia 22032
DATE 10/13/98	SIGNATURE fraud Gat. fr.
	<i>V</i>
Full Name of Additional Joint Inventor KIPP, Neill	Citizenship United States
Residence Address - Street 319 New Kent Road	Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Blacksburg	City Fairfax
State or Country Zip Virginia 24060	State or Country Zip Virginia 22032
DATE 10/13/98	SIGNATURE
Full Name of Additional Joint Inventor RAPP, Perry Russell	Citizenship United States
Residence Address – Street 48278 Keel Drive	Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Lexington Park	City Fairfax
State or Country Zip Maryland 20653	State or Country Zip Virginia 22032
DATE 10/13/98	SIGNATURE
Full Name of Additional Joint Inventor	Citizenship
Residence Address – Street	Post Office Address Street
City	City
State or Country Zip	State or Country Zip
DATE	SIGNATURE

See following pages for additional joint inventors

FROM

P. 1

ATTORNEY DOCKET No . NIST-0006-1

DECLARATION FOR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

		Page 2	
Null News of Additional John Inventor GROAT, Robert		Chizenzhip United States	
Residence Address – Siresi 45862 Aberdeen Lane	·	Fon Office Address Street QED Innovations, 4013 Williamsburg Court	
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Registrate Astrons – Street 319 New Kent Road		Fost Office Address Street QED Innovations, 4013 Williamsburg Court	
Cty Blacksburg		Cby Fairfax	
State or Country Virginia	7.19 24960	State or Country Virginia 22032	
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Pall Name of Additional John Inventor RAPP, Perry Russell		Chicanahip / United States	
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cay Laxington Park	•	City Fairfax	
State or Country Maryland	24 2 20653	Stair or Country Zip Virginia 22032	
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Pull Name of Additional Joint Investor		Citizenship	
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ATTORNEY DOCKET NO. NIST-0006-1 DECLARATION FOR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

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Residence Address - Street 43862 Aberdeen Lane	•	Post Office Address Seest QED Innovations, 4013 Williamsburg	Court
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See following power for additional John inventors.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
BURFIELD, et al.)	
Serial Number: to be Assigned)	Art Unit:
Filed: Concurrently)	Examiner:
For: OBJECT-BASED NUMERIC ANALYSIS ENGINE)	

Assistant Commissioner for Patents Washington, D.C. 20231

ASSOCIATE POWER OF ATTORNEY

Sir:

I hereby appoint Mark Guttag, Registration Number 33,057, as my associate attorney in the above-captioned application, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent and to transact all business in the Patent Office connected therewith.

However, please continue to address all future communications to the undersigned attorney at the following:

Ajay A. Jagtiani
JAGTIANI & ASSOCIATES
Democracy Square Business Center
10379-B Democracy Lane
Fairfax, Virginia 22030

Respectfully submitted,

Registration Number 35,205

JAGTIANI & ASSOCIATES
Democracy Square Business Center
10379-B Democracy Lane
Fairfax, Virginia 22030
(703) 591-2664

October 9, 1998

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VERILIED SEATEMENT (DECLARATION) BY ASSIALL BESINE CLAMING SALVE EXTITY STATES ENDER 37 C F.R. §§ 1.9(F	SS CONCERN ') AND 1.27(C)
thereby declare that land	
☐ the country of the small histories's concern dentified below ☑ an official of the small histories's concern empowered to get on behalf of the concern:	identified below
Samus of Concern QFB Innovations	
vidtes 4013 Williamsburg Court, Forfax, V v. 22032	
I hereby declate that the above identified mall business concern qualifies as a small business co. 15, and reproduced in 3° CFR 19-0, for Liposes of paying reduced fees under section 41 in Cade in that the number of employees of the concern, including those of its affiliates, does not of this statement. (1) the number of employees to the average over the previous fixed year of the natifilation. Put time of temporary basis during each of the pay periods of the fixed year of the other infliction indirectly on indirectly one consent controls of has the power to control both or has the power to control both.	exceed 500 persons. For purposes exceed 500 persons. For purposes e concern of the persons employed at (2) concerns are affiliates of each
Thereby declare that rights utilize contract of law have been conceved to and remain with the sind with regard to the main of described in. 130 The specification filed nerowith with the rite as listed and ve. 131 The patent application identified above. 141 The PCT Intermational patent application identified above. 152 The patent number of patent application identified above.	
if the rights held by the above identified small business concern are not exclusive, each individuality to the invention units file separate ventiled statements avering to their status as small entity held by any person, other than the inventor, who would not qualify as an independent inventor made the invention of by any concern who would not qualify as a small business concern a longitude on inventor in the inventor or of the inventor of th	r under 3" CFR 1 900 if that person ander 3" CFR 1 900, or a nonprofit
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Lacknowledge the duly to file, in this application or patent, nonlication of any change in status testiting in loss of entitlement to small entity status prior to paying for at the time of paying, the earliest of the issue tee or any maintenance fee due after the date on which status as a small entity to hope appropriate (FTCFR 1.25th).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and helicit are believed to be true, and further that these statements were made with the knowledge that wilful take statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 or Title is or the United States Code, and that such willful take statements may reopardize the validity of the application, any patent issuing thereop, or any patent to which the action of the departments are reopardize the validity of the application, any patent issuing thereop, or any patent to which the visited statement is directed

A company of the contract of t	10/15/98
Chia Chen Chang, President	60/
4013 Williamsburg Court, Fairfax, V \ 22032	W W

ASSIGNMENT

M. commission annivar	Notary Public
Before me personally appeared and saidacknowledges this instrument to be his (her) free act and deed this,	
City/County of	, and
McLean, Virginia 22101	Date: 10/15/718 SSN.: 578-64-3304 Notarization preferred but not required
Inventor: Chia Chen Chang Address: 804 Lawton Street	Signature
ASSIGNOR hereby authorizes and requests the Commission any and all United States Letters Patent referred to above to ASSIGN in and to the same, for ASSIGNEE'S sole use and behalf; and for representatives and successors, to the full end of the term for which fully and entirely as the same would have been held by ASSIGNOR in the same wo	NEE of the entire right, title and interest the use and behalf of ASSIGNEE'S legal h such Letters Patent may be granted, as
ALSO, ASSIGNOR hereby agrees to execute any docur connection with the filing, prosecution and maintenance of application(s) or inventor certificate(s) in the United States and including additional documents that may be required to affirm invention, all without further consideration. ASSIGNOR also agree ASSIGNEE's expense, to identify and communicate to ASSIGNEE information concerning the invention that are within ASSIGNOR'S further assurances and testimony on behalf of ASSIGNEE that law respect of the prosecution, maintenance and defense of any pat within the terms of this instrument. ASSIGNOR'S obligations ASSIGNOR'S heirs, executors, administrators and other legal representations.	said application or any other patent in foreign countries for said invention, the rights of ASSIGNEE in and to said es, without further consideration and at at ASSIGNEE's request documents and s possession or control, and to provide fully may be required of ASSIGNOR in tent application or patent encompassed under this instrument shall extend to
NOW, THEREFORE, for good and valuable consideration acknowledged, we, ASSIGNOR, by these presents do sell, assign entire right, title and interest in and to said invention and application, including any and all United States Letters Patent accontinuation-in-part and reissue of said application; and the entire invention throughout the world, including the right to apply for pathereof and to claim priority pursuant to rights accorded ASI International Convention and all other available international corright, title and interest in and to any and all patents, patents importation, revalidation patents and inventor certificates which respect of said invention.	and transfer until said ASSIGNEE, the cation throughout the United States of granted on any division, continuation, the right, title and interest in and to said tents and inventor certificates in respect SIGNOR under the terms of the Paris conventions and treaties; and the entire of addition, utility models, patents of
WHEREAS, QED Innovations, whose post office as Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desired interest in and to the same in the United States and throughout the	us of acquiring the entire right, title and
WHEREAS, Chia Chen Chang, whose post office address to as Assignor), has invented certain new and useful improved ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for Letters Patent was filed October 15, 1998, Serial Number:	nents in an OBJECT-BASED NUMERIC- r which an application for United States

ASSIGNMENT

WHEREAS, Matthew Eichler, whose post office address as Assignor), has invented certain new and useful improvem ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for Letters Patent was filed October 15, 1998, Serial Number:	nents in an OBJECT-BASED NUMERIC- or which an application for United States	
WHEREAS, QED Innovations, whose post office a Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desired interest in and to the same in the United States and throughout the	us of acquiring the entire right, title and	
NOW, THEREFORE, for good and valuable consi acknowledged, we, ASSIGNOR, by these presents do sell, assign entire right, title and interest in and to said invention and appl America, including any and all United States Letters Patent continuation-in-part and reissue of said application; and the entimovention throughout the world, including the right to apply for pathereof and to claim priority pursuant to rights accorded Assinternational Convention and all other available international cright, title and interest in and to any and all patents, patents importation, revalidation patents and inventor certificates which respect of said invention.	and transfer until said ASSIGNEE, the ication throughout the United States of granted on any division, continuation, re right, title and interest in and to said atents and inventor certificates in respect SSIGNOR under the terms of the Paris conventions and treaties; and the entire of addition, utility models, patents of	
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE'S expense, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and information concerning the invention that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.		
ASSIGNOR hereby authorizes and requests the Commission any and all United States Letters Patent referred to above to ASSI in and to the same, for ASSIGNEE's sole use and behalf; and for representatives and successors, to the full end of the term for white fully and entirely as the same would have been held by ASSIGNOR.	GNEE of the entire right, title and interest the use and behalf of ASSIGNEE'S legal on such Letters Patent may be granted, as	
made.	<i>M</i> . 25	
Inventor: Matthew Eichler	Massellie	
Address: 2629 Washington Blvd.,	Signature	
Arlington, Virginia 22201	Date: 10/15/98	
	SSN.: /09-50-5/91 Notarization preferred but not required	
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State of, City/County of,		
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Before me personally appeared and said acknowledges this instrument to be his (her) free act and deed thi	s, and, day of	
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	Notary Public	
My commission expires:	,	

ASSIGNMENT

My commission expires:	Notary Public
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Address: 6314 Kiteline Court Columbia, Maryland 21044 State of, City/County of,	Signature Date: 10 /15/98 SSN.: Notarization preferred but not required
ASSIGNOR hereby authorizes and requests the Commissio any and all United States Letters Patent referred to above to ASSIG in and to the same, for ASSIGNEE'S sole use and behalf; and for representatives and successors, to the full end of the term for which fully and entirely as the same would have been held by ASSIGNOR made. Inventor: Mark Drissel	NEE of the entire right, title and interes the use and behalf of ASSIGNEE'S lega h such Letters Patent may be granted, a
ALSO, ASSIGNOR hereby agrees to execute any docum connection with the filing, prosecution and maintenance of application(s) or inventor certificate(s) in the United States and including additional documents that may be required to affirm invention, all without further consideration. ASSIGNOR also agree ASSIGNEE's expense, to identify and communicate to ASSIGNEE information concerning the invention that are within ASSIGNOR'S further assurances and testimony on behalf of ASSIGNEE that law respect of the prosecution, maintenance and defense of any pat within the terms of this instrument. ASSIGNOR'S obligations ASSIGNOR'S heirs, executors, administrators and other legal representations.	said application or any other patent in foreign countries for said invention the rights of ASSIGNEE in and to said es, without further consideration and at at ASSIGNEE'S request documents and possession or control, and to provide fully may be required of ASSIGNOR in ent application or patent encompassed under this instrument shall extend to
NOW, THEREFORE, for good and valuable consideration acknowledged, we, ASSIGNOR, by these presents do sell, assign entire right, title and interest in and to said invention and applied America, including any and all United States Letters Patent of continuation-in-part and reissue of said application; and the entire invention throughout the world, including the right to apply for pathereof and to claim priority pursuant to rights accorded Assignmentational Convention and all other available international corright, title and interest in and to any and all patents, patents importation, revalidation patents and inventor certificates which mespect of said invention.	and transfer until said ASSIGNEE, the cation throughout the United States of granted on any division, continuation the right, title and interest in and to said tents and inventor certificates in respections. Signor under the terms of the Parison conventions and treaties; and the entire of addition, utility models, patents of the granted throughout the world in
WHEREAS, QED Innovations, whose post office and Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desirous interest in and to the same in the United States and throughout the	is of acquiring the entire right, title and
WHEREAS, Mark Drissel, whose post office addresses a ASSIGNOR), has invented certain new and useful improvemer ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for Letters Patent was filed October 15, 1998, Serial Number:	nts in an OBJECT-BASED NUMERIC which an application for United States

ASSIGNMENT
WHEREAS, Richard Garrett, whose post office addresses appear below (hereinafter referred to as ASSIGNOR), has invented certain new and useful improvements in an OBJECT-BASED NUMERIC-ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for which an application for United States Letters Patent was filed October 15, 1998, Serial Number:;
WHEREAS, QED Innovations, whose post office address is 4013 Williamsburg Court, Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world;
MONE OF THE PROPERTY AND ADDRESS OF THE PROPERTY OF THE PROPER

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, we, ASSIGNOR, by these presents do sell, assign and transfer until said ASSIGNEE, the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application; and the entire right, title and interest in and to said invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded ASSIGNOR under the terms of the Paris International Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said invention.

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE'S expense, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and information concerning the invention that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE'S sole use and behalf; and for the use and behalf of ASSIGNEE'S legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

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Inventor: Richard Garrett	acha Baulo
Address: 9852 Fairfax Square #225	Signature
Fairfax, Virginia 22031	Date: 057.15,1998
· -	SSN.: 330-50-9370
	Notarization preferred but not required
State of	- -
State of, City/County of,	
Before me personally appeared and said	, and
acknowledges this instrument to be his (her) free act and deed this	day o
	Notary Public
My commission expires:	

ASSIGNMENT	
WHEREAS, Robert Groat, whose post office addressed ASSIGNOR), has invented certain new and useful improvem ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for Letters Patent was filed October 15, 1998, Serial Number:	nents in an OBJECT-BASED NUMERIC for which an application for United States
WHEREAS, QED Innovations, whose post office Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desir interest in and to the same in the United States and throughout the	ous of acquiring the entire right, title and
NOW, THEREFORE, for good and valuable cons acknowledged, we, ASSIGNOR, by these presents do sell, assigentire right, title and interest in and to said invention and app America, including any and all United States Letters Patent continuation-in-part and reissue of said application; and the entinvention throughout the world, including the right to apply for patents and to claim priority pursuant to rights accorded A International Convention and all other available international right, title and interest in and to any and all patents, patents importation, revalidation patents and inventor certificates which respect of said invention.	gn and transfer until said ASSIGNEE, the plication throughout the United States of granted on any division, continuation, tire right, title and interest in and to said patents and inventor certificates in respect ASSIGNOR under the terms of the Paris conventions and treaties; and the entire is of addition, utility models, patents of
ALSO, ASSIGNOR hereby agrees to execute any docu connection with the filing, prosecution and maintenance of application(s) or inventor certificate(s) in the United States and including additional documents that may be required to affirm invention, all without further consideration. ASSIGNOR also agraes ASSIGNEE's expense, to identify and communicate to ASSIGNOR further assurances and testimony on behalf of ASSIGNEE that lar respect of the prosecution, maintenance and defense of any pawithin the terms of this instrument. ASSIGNOR's obligations ASSIGNOR's heirs, executors, administrators and other legal representations.	said application or any other patent in foreign countries for said invention, in the rights of ASSIGNEE in and to said ees, without further consideration and at E at ASSIGNEE's request documents and the spossession or control, and to provide wfully may be required of ASSIGNOR in attent application or patent encompassed a under this instrument shall extend to
ASSIGNOR hereby authorizes and requests the Commissi any and all United States Letters Patent referred to above to ASSI in and to the same, for ASSIGNEE'S sole use and behalf; and for representatives and successors, to the full end of the term for which fully and entirely as the same would have been held by ASSIGNO made.	GNEE of the entire right, title and interest the use and behalf of ASSIGNEE'S legal ch such Letters Patent may be granted, as DR had this assignment and sale not been
made.	111/1/
Inventor: Robert Groat	Belly JULI
Address: 45862 Aberdeen Lane	Signature
Valley Lee, Maryland 20692	Date: 6/15/18 SSN.: 2,660 8 492 Notarization preferred but not required
State of,	Freezensa odenot rodanoa
City/County of	
Before me personally appeared and said	, and
acknowledges this instrument to be his (her) free act and deed this	s day of

My commission expires:

Notary Public

To the second

10-15-1998 3:11PM

ASSIGNMENT

WHEREAS, Neill Kipp, whose post office addresses appear below (hereinafter referred to as ASSIGNOR), has invented certain new and useful improvements in an OBJECT-BASED NUMERIC ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for which an application for United States Letters Patent was filed October 15, 1998, Serial Number:_

WHEREAS, QED innovations, whose post office address is 4013 Williamsburg Court, Fairlax Virginia, (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire right, this and interest in and to the same in the United States and throughout the world;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, we, ASSIONOR, by these presents do sell, assign and transfer until said Assignment the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application; and the entire right, title and interest in and to said invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded ASSIGNOR under the terms of the Paris International Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said invention.

ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filling, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention. including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention, all without further consideration. Assignor also agrees, without further consideration and at ASSIGNEE'S expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSERVEE that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives.

Assiction hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to Assignees of the entire right, title and interest in and to the same, for Assignee's role use and behalf, and for the use and behalf of Assignee's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as

fully and entirely as the same would have been held by A951GNO	R had this assignment and sale not be
made.	11.11
Inventor: Neili Kipp	X/VIII/Page
Address: 319 New Kent Road	Signature
Blacksburg, Virginia 24060	Date: 10/15/99 #
•	SSN .: 260 -06-0637
	Notarization preferred but not require
State of	•
City/County of	
Before me personally appeared and said	, and
acknowledges this instrument to he his (her) free act and deed this	day
CONTRACTOR	
	Visit Control of the
A.A	Notary Public
My commission expires:	

The first grown gr

ASSIGNMENT

WIIEREAS, Perry Russell Rapp, whose post office addresses appear below (hereinafter referred to as ASSIGNOR), has invented certain new and useful improvements in an OBJECT-BASED NUMERIC-ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for which an application for United States Letters Patent was filed October 15, 1998, Serial Number:

WHEREAS, QED Innovations, whose post office address is 4013 Williamsburg Court, Fairfax Virginia, (hereinafter referred to as ASSIGNEF), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world;

NOW. THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, we, ASSIGNOR, by these presents do sell, assign and transfer until said ASSIGNEE, the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application; and the entire right, title and interest in and to said invention forcefor the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded ASSIGNOR under the terms of the Paris International Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and invantor certificates which may be granted throughout the world in respect of said invention.

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filling, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of Assignee in and to said invention, all without further consideration. Assignore a Assignee, without further consideration and at ASSIGNEE'S expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNEE's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.

ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to Issue any and all United States Letters Patent referred to above to ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE'S sole use and behalf, and for the use and behalf of ASSIGNEE'S legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

		, let Mall
	Perry Russell Rapp	X Mindelly
Accress:	48278 Keel Drive	Signature @
	Lexington Park, Maryland 20653	Date: <u>Ucx 15 1998</u>
		SSN.:
		Notarization preferred but not required
State of		•
State of _ City/Cour	my of	
Before me	e personally appeared and said	, and
acknowle	dges this instrument to be his (her) free uct and deed this	day of
*****	A STATE OF THE PARTY OF THE PARTY.	
		Notary Public
My comm	ilizion expires:	

My commission expires:

ASSIGNMENT	•
WHEREAS, Evan G. Burfield, whose post office to as ASSIGNOR), has invented certain new and useful impranalysis Engine (hereinafter referred to as The Invention Letters Patent was filed October 15, 1998, Serial Number:	rovements in an OBJECT-BASED NUMERIC N) for which an application for United State.
WHEREAS, QED Innovations, whose post office Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is definiterest in and to the same in the United States and throughout	esirous of acquiring the entire right, title and
NOW, THEREFORE, for good and valuable of acknowledged, we, ASSIGNOR, by these presents do sell, as entire right, title and interest in and to said invention and a America, including any and all United States Letters Pate continuation-in-part and reissue of said application; and the invention throughout the world, including the right to apply for thereof and to claim priority pursuant to rights accorded International Convention and all other available internation right, title and interest in and to any and all patents, pate importation, revalidation patents and inventor certificates white respect of said invention.	ssign and transfer until said ASSIGNEE, the application throughout the United States of ent granted on any division, continuation, entire right, title and interest in and to said or patents and inventor certificates in respect. ASSIGNOR under the terms of the Paris all conventions and treaties; and the entire ents of addition, utility models, patents of
ALSO, ASSIGNOR hereby agrees to execute any deconnection with the filing, prosecution and maintenance application(s) or inventor certificate(s) in the United States a including additional documents that may be required to affilinvention, all without further consideration. ASSIGNOR also a ASSIGNEE'S expense, to identify and communicate to ASSIGN information concerning the invention that are within ASSIGN further assurances and testimony on behalf of ASSIGNEE that respect of the prosecution, maintenance and defense of any within the terms of this instrument. ASSIGNOR'S obligation ASSIGNOR'S heirs, executors, administrators and other legal representations.	of said application or any other patent and in foreign countries for said invention, irm the rights of ASSIGNEE in and to said agrees, without further consideration and at ENEE at ASSIGNEE's request documents and NOR'S possession or control, and to provide t lawfully may be required of ASSIGNOR in a patent application or patent encompassed ons under this instrument shall extend to
ASSIGNOR hereby authorizes and requests the Comminany and all United States Letters Patent referred to above to A in and to the same, for ASSIGNEE'S sole use and behalf; and representatives and successors, to the full end of the term for w fully and entirely as the same would have been held by ASSIGNADE. Inventor: Evan G. Burfield Address: 9852 Fairfax Square #225 Fairfax, Virginia 22031	SSIGNEE of the entire right, title and interest for the use and behalf of ASSIGNEE'S legal which such Letters Patent may be granted, as
State of City/County of,	
	, and
Before me personally appeared and said	this day of

Notary Public